

CLAIMS:

1. A distribution switch for a local exchange, including:
 - an access unit for switching video channels transmitted to subscribers in response to channel requests received from subscribers; and
 - a control unit for controlling switching of the channels by the access unit in accordance with stored conditional access data.
2. A distribution switch as claimed in claim 1, wherein the control unit receives the channel requests and forwards the requests to the access unit in accordance with the conditional access data.
3. A distribution switch as claimed in claim 2, wherein the control unit receives the conditional access data from a remote management system.
- 15 4. A distribution switch as claimed in claim 2 or 3, including a channel interface unit for receiving video signals for the video channels and extracting the conditional access data from the video signals for input to the control unit.
- 20 5. A distribution switch as claimed in claim 2, 3 or 4, wherein the conditional access data includes content description data for the video channels and entitlement data for the subscribers.
6. A distribution switch as claimed in claim 5, wherein said control unit compares said content description data and said entitlement data for said requests and allows transmission of a requested one of said video channels to a subscriber when said entitlement data for said subscriber indicates the subscriber is allowed access to content of the requested video channel, characteristics of said content being represented by said content description data.
- 30 7. A distribution switch as claimed in claim 6, wherein said characteristics include

program tier level and said entitlement data includes tier level data.

8. A distribution switch as claimed in claim 7, wherein said characteristics include geographic information and said entitlement data includes geographic data.

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9. A distribution switch as claimed in claim 8, wherein said entitlement data includes expiry data.

10. A distribution switch as claimed in claim 9, wherein said characteristics include
10 program classification data.

11. A distribution switch as claimed in claim 10, wherein the switch transmits said program classification data to said subscribers.

15 12. A distribution switch as claimed in claim 11, wherein said switch communicates with subscriber equipment at the premises of said subscribers, and said subscriber equipment uses said program classification data to control access to said video channels.

13. A distribution switch as claimed in claim 10, 11 or 12, wherein said program
20 classification data is parental level and/or copy protection data

14. A distribution switch as claimed in claim 9, wherein said subscriber is allowed access
to content of said requested video channel when said program tier level corresponds to said
tier level data for the subscriber, the geographic data for the subscriber matches said
25 geographic information and the current time is less than that represented by said expiry data.

15. A distribution switch as claimed in claim 4, wherein said video signals are DVB signals and said channel interface unit includes means for extracting from the DVB signals said video channels, and means for multiplexing the video channels onto a data path for the
30 access unit.

16. A distribution switch as claimed in claim 15, wherein the video channels include MPEG channels and are multiplexed into time division multiplexed signals for transmission on the data path.

5 17. A distribution switch as claimed in claim 15, wherein the video channels include
MPEG channels and are multiplexed into ATM cells for transmission on the data path.

18. A distribution switch as claimed in any one of the preceding claims, wherein said access unit includes DSL transceivers for transmitting said video channels and receiving said 10 channel requests.

19. A distribution system for a local exchange, including:

a subscriber access system; and

a DVB interface unit having means for receiving DVB signals, means for extracting the DVB signals a plurality of video channels, and means for multiplexing said video channels onto a data path for the subscriber access system.

20. A distribution system as claimed in claim 19, wherein said video channels are MPEG channels.

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21. A distribution system as claimed in claim 20, wherein said channels are multiplexed into time division multiplex (TDM) signals for transmission on the data path.

22. A distribution system as claimed in claim 20, wherein said channels are multiplexed
25 into ATM cells for transmission on the data path.

23. A distribution system as claimed in claim 21 or 22, wherein said means for extracting includes an MPEG transport stream processor for receiving DVB feeds and extracting a plurality of MPEG channels, and said means for multiplexing includes a multiplexer for 30 multiplexing said MPEG channels into data words for said data path, and said subscriber

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access system includes a control unit for selecting said video channels from said data path.

24. A distribution system as claimed in claim 23, wherein said access system switches and transmits the video channels to subscribers in response to channel requests received from the 5 subscribers, and said control unit controls switching of the channels.

25. A distribution system as claimed in claim 24, wherein said DVB interface unit includes means for removing jitter from said video channels.

10 26. A distribution system as claimed in claim 19, wherein the DVB interface unit includes means for accessing conditional access data from the DVB signals.

27. A distribution system as claimed in claim 26, wherein the conditional access data includes content description data for the video channels and entitlement data for the 15 subscribers.

28. A distribution system as claimed in claim 27, wherein said access system includes a control unit for storing the conditional access data and controlling switching of the channels by subscribers in accordance with the stored conditional access data.